



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/079,468	05/15/1998	AKIRA NISHIMURA	360842003400	8388

7590 02/02/2004
Morrison & Forester LLP
1650 Tysons Boulevard
Suite300
McLean, VA 22102

EXAMINER

PRATT, CHRISTOPHER C

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
P.O. Box 1450
ALEXANDRIA, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 20040121

Application Number: 09/079,468
Filing Date: May 15, 1998
Appellant(s): NISHIMURA ET AL.

Raj Dave
For Appellant

EXAMINER'S ANSWER

MAILED
JAN 30 2004
GROUP 1700

This is in response to the appeal brief filed 9/16/03.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that all claims stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

Art Unit: 1771

5,100,713

HOMMA et al

3-1992

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kishi et al (5447785) in view of Homma et al (5100713).

Kishi's patent is concerned with the creation of a cloth prepreg comprising a woven fabric impregnated with a resin (summary). Kishi teaches a post-impregnated prepreg having a cover factor anticipating applicant's claimed cover factor (col. 14, lines 35-41). Kishi's fabric also discloses applicant's claimed crossing point ranges, width, yarn flatness, and area between openings of warp and weft (cols. 3-4, lines 40-10, col. 10, lines 2-20, and col. 11, lines 1-15).

Said fabric woven from carbon fiber having a weight anticipating applicant's claimed weight (col. 11, lines 1-15).

Said resin comprising a thermosetting phenol resin (col. 17, lines 45-60).

Kishi teaches applying a sizing agent to the yarns (col. 10, lines 10-30).

Kishi is concerned with maintaining yarn flatness but fails to teach applying a binder in a line-like manner. Homma is concerned with the creation of an impregnated

Art Unit: 1771

carbon fiber prepreg (abstract). Homma teaches applying a binder in a line-like manner to maintain yarn flatness (col. 5, lines 42-50 and col. 6, line 54). Therefore, it would have been obvious to a person having ordinary skill in the art to use the line-like binder of Homma in the fabric of Kishi. Such a combination would have been motivated by the desire to increase a resins ability to impregnate the prepreg (col. 6, lines 50-54), to aid in maintaining yarn flatness, and to increase the dimensional stability of the fabric.

(11) *Response to Argument*

Appellant argues that there is no motivation to utilize the binder of Homma in the fabric of Kishi (Appellants arguments, p. 6). However, it is the examiner's position that the motivation comes directly from Homma. In col. 6, lines 50-55, Homma teaches that the fabric can be impregnated more efficiently if a binder is added by lines. Moreover, the skilled artisan would readily recognize that a binder would further aid in maintaining the flatness of the yarns. This binder would increase the dimensional stability of the fabric by securing the individual yarns so that they do not move around and develop undesirable twisting when the fabric is put under stress. The examiner notes that Kishi is highly concerned with maintaining yarn flatness (abstract, col. 3, lines 16, col. 4, lines 26, and col. 10, lines 17-18).

Appellant argues that Homma does not teach a yarn flattening operation or the desire to have flat yarns (p. 10). However, in col. 4, lines 17-22, Homma specially teaches that flat yarns (free from twisting) are desired. In this passage Homma describes the correlation between yarn flatness and improved impregnation ability which

Art Unit: 1771

is achieved by the line bonding of col. 6, lines 50-55. Homma teaches that when the yarns are free of twisting the impregnation ability of the matrix material is improved.

Appellant argues that they were the first to recognize a problem not known in the art and obtained unexpected results of improved cover factor (p. 11-12). However, Kishi specifically teaches that a cover factor of 99% is desirable (col. 14, lines 10-15).

Appellant argues that objective evidence of commercial success, failure of others, and long-felt need must be considered; however, no such evidence has been presented.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Christopher C Pratt
Examiner
Art Unit 1771

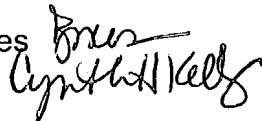


January 25, 2004

Conferees

Deborah Jones

Cynthia Kelly



BARRY E BRETSCHNEIDER
MORRISON & FOERSTER
2000 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 20006-1888